

MASTER OF APPLIED MATERIALS CHEMISTRY

Master's Thesis: July 2022

- Alonso González, Pablo (*Supervisor: P. Gámez, QI*)
"Triazine-based Polypyridine Ru(II) Complexes as Potential Photodynamic Therapy Agents"
- Analuiza Vergara, César Patricio (*Supervisor: I. Angurell, QI*)
"Synthesis of Gold(I) Alkynyl Complexes based on Triphenylene Derivative Ligands"
- Balsells Vives, Marc (*Supervisor: G. Gabriel, IMB-CNM*)
"Gold Nanoparticles Dispersion formulated into Inkjet Ink: Development and Characterization"
- Beltrán Sánchez, Laura (*Supervisors: G. Bataglia and M. Kumar, IBEC*)
"Synthesis and Self-assembly of Minimalistic Lipid Peptide"
- Caballero Gutiérrez, Sergio (*Supervisor: J. Mayans, QI*)
"A Family of Tetranuclear Double-stranded Cu^{II}-Ln^{III} Helicates. Structural and Magnetic Study"
- Capó Serrano, Nuria (*Supervisor: L. A. Barrios, QI*)
"Design and Synthesis of Multifunctional Heteroleptic Systems of Fe(II) and Co(II)"
- Cardona Olives, Joan (*Supervisor: J. Jover, QI*)
"Computational Construction of S_N2 Reaction Database: Barrier Modelling and Statistical Analysis"
- Carmona Ruiz, Marina (*Supervisors: Alisiya B. Tahchieva and Nuria Llorca, CEM*)
"Superhydrophobic Cotton for the Removal of Microplastics in Aqueous Solution"
- Cuesta Troyano, Alejandro (*Supervisor: E. C. Sañudo, QI*)
"Synthesis and Structural Study of 1-D and 2-D Lanthanide Complex"
- de la Rosa de Frutos, Sara (*Supervisor: P. Ll. Cabot, QF*)
"Fe-N_x/C Catalysts for the Oxygen Reduction Reaction Prepared with Precursors Obtained from Biological Sources"
- de Paz Castany, Roger (*Supervisor: M. Estrader, QI*)
"Bi-magnetic Core@shell CoFe₂O₄@NiO Nanoparticles for Room Temperature Magnetic Properties Modulation"
- del Moral González, Maria (*Supervisor: S. Muro, IBEC*)
"Analysis of Different PLGA Copolymers Nanoparticles for Lysosomal Enzyme Release"
- Domínguez Hervella, Eva (*Supervisor: M. Coll, ICMAB*)
"Atomic Layer Deposition of All-oxide Heterostructures for Unconventional Photovoltaics"
- González Romero, Carlos (*Supervisors: M. Estrader, QI and A. Gómez, ICN2*)
"Multifunctional Magneto-optical Nanostructures for Biosensing and Theranostic Applications"
- Llauradó-Capdevila, Gemma (*Supervisor: J. Puigmartí-Luis, QF*)
"Confined Synthesis of Functional Matter and its Effects on Morphogenesis"

- Luque Rueda, Jorge (*Supervisor*: P. Ll. Cabot, QF)
“Structural and Electrochemical Characterization of Carbon-Supported PtNi Alloys as Electrocatalysts for Reactions”
- Marco Gibert, Josep (*Supervisors*: N. Homs and X. Vendrell, QI)
“Approach to the Hydrothermal Synthesis of MXenes”
- Márquez González, Santiago (*Supervisor*: M. Torrell, IREC)
“Advanced Manufacturing of New High Temperature Ceramic for Solid Oxide Cells (SOCs) Applications”
- Martínez-Segura, Albert (*Supervisor*: A. Grabulosa and J. Granell, QI)
“Cyclometallated Ruthenium(II) Complexes for Transfer Hydrogenation of Ketones”
- Martínez Medina, Yaiza (*Supervisor*: A. Grabulosa, QI)
“Rhodium(I) Complexes with *P*-Stereogenic, Methylene-Bridged Diphosphanes as Hydrogenation Catalysts”
- Mena Barrientos, Yago (*Supervisor*: J. Rubio, QF)
“Uncover the Biological Activity of Dark Chemical Matter as SARS-CoV-2 Inhibitors”
- Morales Pérez, Roger (*Supervisor*: A. Figuerola, QI)
“Synthesis and Characterization of Nanostructured Bi₂S₃ and Derivative Ternary Compounds by Colloidal Methods”
- Real Vives, Marta (*Supervisor*: J. Albert, QI)
“Three Component One Pot Synthesis of Imine Cyclopalladated Compounds”
- Ruiz Relaño, Sara (*Supervisors*: A. Carné and D. Maspoch, ICN2)
“Synthetic Strategy for Multicomponent Metal-Organic Polyhedra”
- Sanahuja Rosich, Èric (*Supervisor*: J. Formosa, CEM)
“Optimization and Synthesis of Synthetic Ettringite”
- Sánchez Ruiz, Adrià (*Supervisors*: P. Ramírez de la Piscina and M. L. Mestres, QI)
“Preparació de Catalitzadors basats en MXens per a la Reacció Inversa de Desplaçament de Vapor d’Aigua”
- Sanz Mir, Martí (*Supervisor*: J. Puigmartí-Luis, QF)
“Crystallization of Peptide-based MOFs Gels controlling the Diffusion of Solvents across PDMS Membranes”
- Surós Roman, Marc (*Supervisors*: N. Aliaga-Alcalde and A. González-Campo, ICMA B)
“Synthesis, Characterization and Exfoliation Optimization of Curcuminoid-Based 2D Layered Materials for Potential Microdevice Applications”
- Torres Andreo, Carla (*Supervisor*: M. I. Giannotti, IBEC)
“Synthesis and Study of Lipid Membranes with High Concentration of Glycosphingolipids”
- Valverde Sanchís, Aïda (*Supervisor*: E. Ruiz, QI)
“Ionic 2D Materials: Synthesis and Characterization”
- Velikov, Dean Ivanov (*Supervisor*: N. Llorca, CEM)
“Magnetic Copper Ferrite Particles for Microplastic Removal from Water”